

Claims

1. A recirculation cooling system, having a refrigeration circuit and a water circuit, wherein the refrigerator circuit, together with the evaporator, liquefier and compressor, has been placed into a receiver housing, wherein the evaporator is arranged in heat-exchanging contact with the water circuit, wherein the water circuit has a tank and a pump assigned to the latter, both of which have been placed into a receiver housing,

characterized in that

the rear wall of the receiver housing (10) is placed against a vertical lateral panel of, for example, a switchgear cabinet, a machine housing or a wall, and the receiver housing (10) is fastened on the latter,

the interior of the receiver housing (10) is divided into two partial spaces by means of a separating wall, wherein the one partial space is arranged between the lateral panel and the separating wall, and the second partial space between the separating wall and the front of the receiver housing (10),

the liquefier (32) and the fan are arranged in the partial space assigned to the front of the receiver housing, and the tank (24), as well as the pump (23), to the rear partial space, and

each of the partial spaces is accessible from the assigned sides of the receiver housing (10).

2. The recirculation cooling system in accordance with claim 1,

characterized in that

the evaporator (22) is housed in the rear partial space of the receiver housing (10).

3. The recirculation cooling system in accordance with claim 2,

characterized in that

a return line (25) of the water circuit (20) is connected with the evaporator (22) which, adjoining the evaporator (22), terminates in the tank (24),

a feed line (26) branching off the pump (23) runs out of the tank (24),

the feed (26) and the return (27) lines are both conducted to the roof area of the receiver housing (10) and project therefrom at least by means of connectors (21) for water circuit lines.

4. The recirculation cooling system in accordance with claim 3,

characterized in that

the feed (26) and return (27) lines are fastened with the connectors (21) on the cover (14) of the receiver housing (10).

5. The recirculation cooling system in accordance with one of claims 1 to 4,

characterized in that

an electronic control device (27) is housed in a lateral receiving area of the receiver housing (10) and is accessible via a separate service cover in the area of the lateral wall (16) of the receiver housing (10).

6. The recirculation cooling system in accordance with

one of claims 1 to 5,

characterized in that

the partial area at the front is connected with the surroundings via at least one opening,

the openings are arranged in the front wall (11) of the receiver housing (10), wherein the fan (31) and the liquefier (32) are connected with the surroundings through the openings, and

the openings are constituted by covers, or are overlapped by covers, which conduct the airflow provided to the liquefier (32) or the fan (31) in different directions by means of guide elements.

7. The recirculation cooling system in accordance with one of claims 1 to 6,

characterized in that

the fan (31) is a radial fan.

8. The recirculation cooling system in accordance with one of claims 1 to 7,

characterized in that

the pump (23) is an immersion pump which is inserted into a tank (24) which is tall in respect to its structural depth.

9. The recirculation cooling system in accordance with one of claims 1 to 8,

characterized in that

the compressor (34) of the refrigeration circuit is arranged in a receiving area which bridges the two partial spaces and is accessible via the front of the receiving housing (10).